

Amendments to the Claims:

1. (currently amended): A method of forming a polysilicon resistor, the method comprising:
providing a substrate, the substrate comprising a dielectric layer;
5 forming a polysilicon layer on the dielectric layer;
doping the polysilicon layer with first type dopants and second type dopants;
defining a polysilicon resistor pattern on the polysilicon layer and removing portions of
the polysilicon layer and the dielectric layer outside the polysilicon resistor pattern down to
the surface of the substrate, the remainder of the polysilicon layer comprising at least a high
10 resistance region and a low resistance region; and
forming a salicide layer on the remainder portions of the polysilicon layer within the low
resistance region.
2. (original): The method of claim 1 wherein the first type dopants comprise N-type dopants
15 and the second type dopants comprise P-type dopants.
3. (original): The method of claim 1 wherein a dosage of the first type dopants and a dosage
of the second type dopants have the same order of magnitude.
- 20 4. (currently amended): The method of claim 1 further comprising forming a salicide block
on the remainder portions of the polysilicon layer within the high resistance region.
5. (original): The method of claim 1 further comprising:
forming an inter layer dielectric on the substrate, the inter layer dielectric comprising at
25 least a contact hole connecting to the salicide layer; and
forming a conductive layer on portions of the inter layer dielectric and within the contact
hole.
6. (original): The method of claim 1 wherein the low resistance region is at the either side of

the high resistance region.

7. (original): A method of forming a high resistance region of a polysilicon resistor, the method comprising:

- 5 providing a substrate, the substrate comprising a dielectric layer;
 forming a polysilicon layer on the dielectric layer; and
 doping the polysilicon layer with first type dopants and second type dopants, thus
 forming the high resistance region on portions of the polysilicon layer.

- 10 8. (original): The method of claim 7 wherein the first type dopants comprise N-type dopants
 and the second type dopants comprise P-type dopants.

9. (original): The method of claim 7 wherein a dosage of the first type dopants and a dosage
of the second type dopants have the same order of magnitude.

15

10. (original): The method of claim 7 further comprising forming a salicide block on the
portions of the polysilicon layer within the high resistance region.

11. (original): The method of claim 7 further comprising forming a salicide layer on the
20 portions of the polysilicon layer except the high resistance region, thus forming at least a low
 resistance region of the polysilicon resistor.

12. (original): The method of claim 11 further comprising:
 forming an inter layer dielectric on the substrate, the inter layer dielectric comprising at least a
25 contact hole connecting to the salicide layer; and
 forming a conductive layer on portions of the inter layer dielectric and within the contact
 hole.

13. (original): The method of claim 11 wherein the low resistance region is at the either side

of the high resistance region.